GEOGRAPHIC NEWS BULLETINS

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THE NATIONAL GEOGRAPHIC SOCIETY

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Photograph from S. C. Johnson & Son, Inc.

THERE'S MANY A MILE 'TWIXT BRAZILIAN JUNGLE AND CITY SHOE SHINE

But carnauba wax makes the journey. Palm-leaf cutters gather fronds from the carnauba palm, loading the panniers of their donkey. The wax extracted from the palm leaves is exported for use in candles, floor wax, shoe polish, and phonograph records. Although more than half of Brazil's carnauba wax comes to the United States, a fraction of the output also enters into the extensive trade with Germany (Bulletin No. 1).

HOW TEACHERS MAY OBTAIN THE BULLETINS

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Germany Woos Latin American Trade

"EXPORT—or die" was the dramatic phrase by which Adolf Hitler in his recent Reichstag speech expressed the vital importance of foreign trade to the German people.

In the highly competitive Latin American field, Germany ranks among the three leading traders. As a result of an intensive drive in recent years she has made important commercial gains in both Central and South America, particularly in Brazil, Chile, Colombia, Ecuador, Peru, and Guatemala.

On the other hand, despite increased business with Uncle Sam's neighbors, Germany is still far behind the United States, which has outdistanced all competitors since the World War upset the apple cart of "normal" trade relations.

Ranks Second to Uncle Sam

In 1937, when the United States sold some 34 per cent, by value, of all incoming goods below the Rio Grande, Germany followed—a not-very-close second—with 15.5 per cent.

According to the record, that same year Great Britain supplied only about 13 per cent of Latin America's imports—a figure which takes on added significance because, since 1933, Germany has forged ahead to about the same extent that Britain has lost ground.

However, these figures do not, authorities say, tell the whole story. Germany's export-trade gain at the apparent expense of Britain is subject to certain reservations, including the possibility of German overvaluation due to discrepancies in international rates, and the fact that the central European nation offers large discounts to Latin buyers. Also, the present-day German Reich has its own system of barter, special currencies, and a complex bookkeeping setup not easily translatable in terms of world comparisons.

Among individual countries, Trader Germany's place in the Latin American sun ranges from light to shade; in terms of sales percentages, from a high in Brazil to a low in Cuba.

No. 1 Customer for Brazil's Cotton

During the first eight months of 1938, she sold to Brazil, for example, nearly one quarter of all the imports into that South American nation. These imports included dyes, iron and steel products, wire, and building materials for Brazil's growing communities.

To balance accounts, Germany took from Brazil cotton, tobacco, hides, and coffee. Number One customer for cotton, Germany offers an outlet for this product not often equaled in a world already groaning under overproduction.

In Chile, another expanding market, Germany sells textiles, automobiles, cement, chemicals, ready-made clothes, coke, glassware—and dynamite. Across the Atlantic in exchange go return cargoes of apples, grains, gold, hides, and sausage casings. Germany is Chile's chief market for nitrates, copper, and beans.

Colombia buys Germany's machinery, radios, dredges and iceboxes. Peru takes her glassware, toys, and tools.

Although Great Britain has been the leading supplier of goods to Argentina since 1930, the latter country also buys from Germany—motor vehicles, ceramics, machinery, paper.

On the receiving end Germany needs grain and meat from Argentina, oil from Venezuela, coffee from Central America, cacao from Ecuador, cotton, wool, and

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© Publishers Photo Service

SHRUBBERY IS A LUXURY IN THE PARK BENEATH ADEN'S BARE ROCKS

They call this part of the Crescent a park, because it sustains most of Aden Peninsula's vegetation. Chief exception is the rare wild flower springing up in crevices of hot rock—the Aden lily. Moisture is so rare that drinking water is condensed from boiled sea water. The American flag marks the U. S. Consulate. Bare crags beyond the town, according to Arab and Jewish traditions, contain the tomb of Abel, murdered son of Adam and Eve (Bulletin No. 5).

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Television Opens the Eyes of the Ether

YOU sit in your darkened living room and witness the dignified pageantry of the Inauguration of a President of the United States. You see a black-robed Supreme Court Justice about six inches high extend a Bible to a miniature President in profile. You see the uplifted hand, hear the solemn words of the oath. You thrill to the marvel of a democratic form of government, and also to the miracle concocted of hearing miniature humans, though miles away, speak in life-size tones. At least, you may experience these thrills if television keeps the rendezvous made at the beginning of this month during a demonstration in Washington, D. C.

The capital was introduced to the NBC mobile television unit, Station W2XBT, operating with portable cameras, a control room in one van, and an ultra-short wave transmitter in a second van with an antenna to "telecast" what the cameras reveal of any daylight street scene. Such equipment and any improvements that the next two years may produce will be on hand to telecast the Inauguration in 1941, National Broadcasting Company officials announced.

Sight Waves Have Different Frequencies from Ordinary Sound Waves

Meanwhile, regular television programs are scheduled to go on the air in New York in April, and at the same time television receiving sets are expected to go on the market. The programs—an hour a night two nights a week—will be sent by cable (illustration, next page) from the television studios to the transmitter atop the Empire State Building. From an antenna a quarter of a mile above the earth, the waves that carry sound are launched into the ether exactly as in ordinary radio broadcasting. The chief difference between ordinary sound broadcasting and the broadcasting of television images is one of degree. Sound, even that of a symphony orchestra, usually is transmitted in a group of frequencies not more than 5,000 cycles wide. A good television image requires frequencies extending from 30 to 4,000,000 cycles within a second's time. In addition, two series of waves—synchronizing impulses—must be broadcast to keep receiver and transmitter in perfect step. A lag of less than one-millionth of a second in the receiving set would make imperfect television pictures. From the outset it is apparent that television is at least three times as complicated as radio.

An added difficulty is the fact that the very high frequency "sight waves" do not bounce in zigzag paths between the earth and a reflecting layer in the sky as do the longer waves used in sound broadcasting. Such repeated reflection permits radio waves to reach far over the horizon—in fact to follow the curvature of the earth completely around the globe. Television waves cannot be captured by receiving sets much beyond the horizon. Draw a straight line from any point on the earth's surface, and you will recognize that the earth curves away from television's path, which shoots straight off through the reflecting layer into outer space and is lost. To "view in" on a television program, therefore, a receiving set must be close enough to the transmitter to be within the television horizon. From the lofty antenna on the Empire State Building, sets within a radius of 55 miles regularly receive television programs in good condition.

Outwardly the receiving set resembles a large radio console with an extra row of buttons and a propped-up lid. The television image—a vision indeed—appears beneath the lid, where the televised scene in perfect miniature comes to life within a frame 7½ by 10 inches—about an inch larger than this page. It creates the illusion of seeing a movie from the last row of the top balcony—small, but distinct and clear, accompanied by full-volume sound.

Electronic Pencil Sketches 30 Pictures Per Second, 441 Lines Per Picture

Yes, they do it with mirrors. Turn off the program, turn on the light, and the eye-level frame vanishes. You have been looking into a clear mirror, set at an angle to reflect figures appearing upside down on a milky horizontal plate embedded in the cabinet of the receiving set.

The television receiving set is a radio set plus. It has about twenty tubes, including the giant cathode-ray vacuum tube 27 inches long that creates the television picture by means of a tiny "pencil" of streaming electrons. It has sound controls for volume and high and low pitch adjustments; it has sight controls for focus, size, speed, and centering adjustments of the picture.

Presiding genius of the television set is the 27-inch funnel-shaped vacuum tube, standing upright like a lily. As a loud speaker translates silent radio waves into sound, this tube translates invisible waves into a visible picture. Its narrow stem contains an electron gun. Its broad top is capped with a glass plate curved to shield the vacuum within from the atmospheric pressure above. The under surface of the glass is coated with a chemical mixture, zinc sulfide, which is capable of fluorescing when struck by electrons. An electrical impulse from the trans-

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cattle hides from Peru, carnauba wax from Brazil (illustration, cover) and tin from Bolivia.

Reported in the news recently was the account of a vast barter agreement between Mexico and Germany, whereby some $17,000,000 worth of petroleum was to be exchanged for German manufactures, machinery, and other goods.

The list of commodities that ride the freight lanes from Latin America to Germany, in fact, has a scope all the way from such big-business essentials as oil to the less-imposing oddities of bones and birdseed.

Note: Latin American countries, whose trade relations with Germany have made headline news recently, may be located on The Society's Map of South America, issued as a free supplement to the *National Geographic Magazine*, for December, 1937, which included the article "Bonds Between the Americas"; and the Map of Mexico, Central America, and West Indies, issued as a free supplement to *The Geographic* for December, 1934. Copies of the maps may be had from The Society's Washington, D. C., headquarters at 50c (paper) and 75c (linen).

Bulletin No. 1, February 20, 1939.

Photograph from U. S. Department of Agriculture

BREAKFAST AROMA STARTS IN BLOOM AND BERRY

Clusters of coffee flowers give off a pleasant fragrance, especially during the one day when the tree is in full bloom. After five years, the coffee tree matures for commercial harvesting, and its bright red berries are picked by hand. Hidden inside the berries are the coffee "beans" of commerce. Both bloom and berry are shown life-size in this photograph. Coffee is the product which almost all the Latin American countries are exporting to Germany in return for manufactured articles. In Costa Rica, where the photograph was made, trade with Germany has increased to one-fifth of the country's foreign commerce.

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Spain's War Victims Pour over Pyrenees into France

BONFIRES along the border at 100-yard intervals marked the frontier of northeastern Spain recently, while day and night France received homeless refugees from the war zone in Catalonia.

On foot, in ancient automobiles, in crowded trains, the exiles climbed from the palm-shaded mild weather of Barcelona through the knee-deep snow of frontier mountain passes in the Pyrenees. They streamed over the boundary line in various stages of exhaustion: hungry, half-frozen, hatless, bearing whatever possessions they had been able to bundle up, carrying their children, their sick—in some cases their dead. French authorities at the frontier town of Cerbera reported admitting three thousand a day.

Peaks on Skyline Make Geographic "Castles in Spain"

The Pyrenees do not encourage traffic. They are not so high as the Alps; but neither are they so broad, averaging not more than 60 miles across. Thus their slopes rise into a steep wall, compared with which the more gradual incline of northern Italy's Alpine barrier presents easy passage for man and beast.

For some 260 miles, from the Bay of Biscay to the Mediterranean, the Pyrenees push skyward in a succession of cloud-nudging peaks and castellated crags that have caused more than one imaginative writer to call them "castles in Spain."

Bleak and barren, with only an occasional red-tiled village or a patch of valley green to relieve the stark rock masses, the Pyrenees are marked by several peculiarities. First, is the absence of big, placid lakes such as distinguish the Alps; instead, roaring waterfalls streak down mountain sides in cascades of spray. Then there are the frequent deep-walled recesses shaped like amphitheaters, called "cirques," at the heads of the valleys. Finally, and most important from the point of view of transport, is the fact that from one end of the mountains to the other, passes are high and rare.

Biographies as Bold and Dramatic as Their Scenery

Only at western and eastern extremities, where the Pyrenees stoop finally to the sea, do low passes occur. These permit passage of the main highways and railways that link Spain with France. Over the high central portion, sometimes called a "storm of hills," there was not even a single carriage road until half a century ago. Today, in the mountains proper, only five passes are practicable for motor traffic.

Yet, despite inaccessibility, these mountains have echoed with man's footsteps from time immemorial, and have seen drama as bizarre and variegated as their scenery.

Over their rugged sides swarmed Celtic tribes, long before Christ, to mix with the Iberians, and later with the trading peoples of the Mediterranean, in forming the population base of the country. Mountain valleys are now the stronghold of the dwindling race of Basques. It was by way of the Pyrenees in the 5th century that Vandal hordes poured in successive waves of fury into Spain, burning and ravaging as they went.

Charlemagne marched down from the north in 778, leading his great army against the Moslems. How the rear guard of his troops was ambushed and slaughtered on the return through the famous western pass of Roncesvalles provided European literature with a hero popular for centuries—Roland.

During the Peninsular War in 1813-14, a whole series of fierce battles was

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mitter modulates the beam fired from the electron gun; when the electrons hit the fluorescent surface, the glass shows a tiny point of light which is bright or dull according to the intensity of the modulated beam of electrons. A pattern of these points is speedily assembled into a picture.

The electron stream is shot in machine-gun sequence across the face of the plate from left to right at a speed of two miles a second; then it zips back to the left at double quick time and repeats the bombardment. It makes 441 trips from left to right to fill in a picture completely from top to bottom. (Whether each tiny "shot" registers as light or shadow is determined by what the television camera reveals of the object being televised.) The 441 scanning lines for each picture are completed too quickly for the human eye to detect the electron pencil in action, and the resultant illusion is comparable to the illusion obtained by the movies, which project 24 still pictures per second to create the impression of movement. The television image is created by a rapid succession of 30 complete pictures per second.

To make them "move" with more fluid lines, they are presented to the eye in two superimposed halves, which interlace. Odd-numbered lines are sketched in first; then the lightning-like "pencil" dashes back towards the top to start filling in the even-numbered lines of the 441.

This electric artist, the automaton wielding a cathode-ray pencil, has been named the Kinescope. But the electric brain which guides the "artist's" pencil is a different kind of tube—the Iconoscope, located in the television camera. This tube contains a plate of about 200,000 photoelectric cells, each one of which registers a tiny portion of the scene being televised and reports whether the portion is light or dark. Its "report" is made in the form of an electric impulse, sent out as a television "signal," received by the Kinescope in the television receiving set, and recorded by the obedient electron-artist on the fluorescent glass plate as an exact copy, in miniature, of a part of the scene before the television camera.

The "reporting" ability of the mosaic in the camera's Iconoscope is due to the peculiar photoelectric quality of the element, caesium. It throws off electrons, thus building up a positive electric charge, in direct proportion to the intensity of the light falling on it. The charge is removed by the action of an electron beam similar to that in the Kinescope.

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Photograph by J. Baylor Roberts

BOTH "SPEAKING TUBE" AND "SEEING TUBE" IS THE COAXIAL CABLE

From the outside, a coaxial cable looks like a lead pipe or a rubber hose. Inside the protective jacket which one sees are two small copper tubes, down the center of each of which runs a smaller copper wire which is insulated from its enclosing tube. The cable makes a compact device capable of carrying 240 telephone conversations at the same time without garbling them. It is being tested as a substitute for the heavy 600-wire cable (left), nine times as large, now used for long distance telephone conversations. But the remarkable coaxial cable can also carry the ultra-short waves of television. It is in use now between the television studios in New York's Radio City and the Empire State Building from which programs are "telecast."

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Earthquakes Are Not New in Chile

EARTHQUAKES have caused so many panics in Chile, that now a mere rumor of an earthquake can start a panic. While the country is recovering from a quake that last month devastated six provinces, Chilean authorities are fighting earthquake rumors with the lash.

It has just been decreed that whoever is found guilty of spreading rumors will be punished by public lashing to the beat of drums.

Called "World's Shakiest Region"

At any whisper of an earthquake, Chileans fear the worst, because their country is one of the shakiest regions in the world. Scientists who keep tab on the earth's seismic disturbances have found that Chile quakes about 1,000 times to Japan's 400. These two countries lie at opposite sides of the world's most active earthquake zone, which almost encircles the Pacific Ocean, and accounts for two out of every three major quake disasters.

A study of Chile's earthquakes, both large and small, for a period of seventeen years revealed more than 12,000.

Few of them, however, have been as devastating or as widespread as the recent one. If this earthquake had occurred on the Pacific coast of the United States, it would have been felt from Canada into Mexico. If on the Atlantic side, it would have extended along the entire east coast from Maine to Palm Beach, Florida.

Agricultural Regions Hit

The northern limit of the quake was Iquique, the southern, Puerto Montt. The greatest damage was done in six provinces: Talca, Maule, Bio-Bio, Cautin, Nuble, and Concepción, about midway of the Chilean coast. In these provinces live approximately one-fourth of Chile's population. The important cities of Concepción and Chillán were in large part destroyed.

Besides the cities, the richest agricultural regions along the coast and in the inland Andean valleys, widely known for their fertility, were in the earthquake area. The valleys were a large factor in giving Chile rank of eighth among the wheat-growing countries of the world in 1937. They are important sources also of Chilean wine.

Earthquakes are not new to Chile. The country's length is stretched along the zone of the world's most frequent earthquakes. This danger zone sweeps from the Netherlands Indies up the coast of Asia, eastward along the Aleutian Islands to Alaska, and thence southward along the Pacific coasts of North and South America to the very tip of the latter continent. Japan, famous for its devastating temblors, is in the zone. Inside this band of activity, which forms a horseshoe around the Pacific, are numerous islands of volcanic origin.

Chief Cities Have Records of Repeated Disasters

Valparaiso, chief port of Chile, was seriously affected by a quake in 1885 and again in 1905. Some 1,500 people were lost in the latter catastrophe and $100,000,000 worth of property was destroyed.

The region of the recent quake's greatest intensity was in the vicinity of Concepción, about a thousand miles south of Valparaiso. This city and its port, Talcahuano, were hard hit. Twice before Concepción was visited by major earthquakes. In 1751 it was almost destroyed and in 1835 part of the city was leveled by temblors.

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fought against the wild background of these mountains, ending eventually with victory for the Duke of Wellington and the expulsion of Napoleon from Spain.

One of the most ancient and storied of Pyrenean towns lately mentioned in the news is La Seo de Urgel, situated just below the mountain-straddling Republic of Andorra. An episcopal see (*seo*) since the early 800's, this city is the home of a cathedral called "modern" by one traveler because it dates merely from the 11th century.

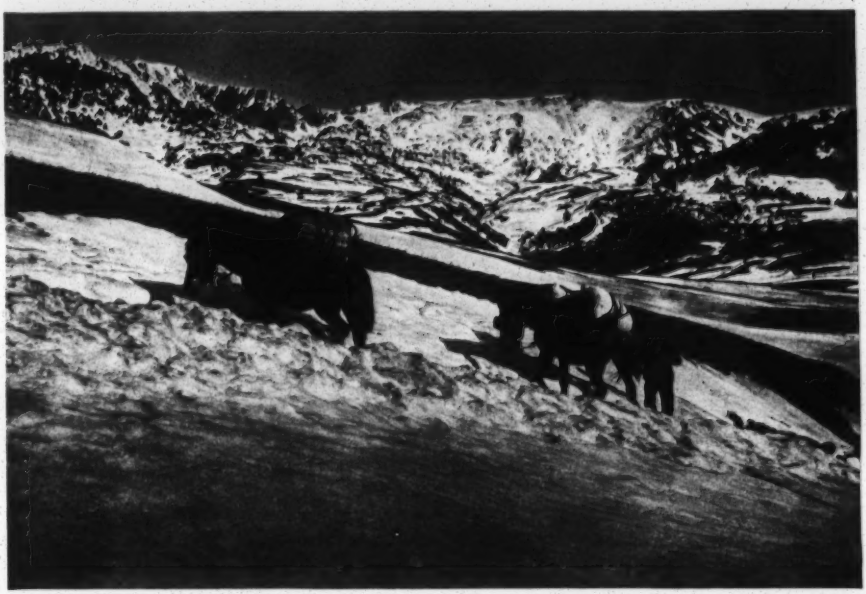
Note: For additional background material about the Pyrenees see "Skyline Drive in the Pyrenees," *National Geographic Magazine*, October, 1937; "Turbulent Spain," October, 1936; "A Palette from Spain," March, 1936; "Andorra—Mountain Museum of Feudal Europe," October, 1933; "Looking Down on Europe," March, 1925; "Discovering the Oldest Statues in the World," August, 1924; "The Land of the Basques," January, 1922; and "Unique Republic, Where Smuggling Is an Industry," March, 1918.

See also in the GEOGRAPHIC NEWS BULLETINS: "Bilbao, Spain's Citadel of the Basques," week of April 26, 1937; and "Telephones for the Middle Ages? Yes, in Andorra!" week of February 17, 1936.

Bulletin No. 3, February 20, 1939.

COLOR PLATES FROM THE NATIONAL GEOGRAPHIC MAGAZINE NOW AVAILABLE

A number of separate color pictures from the *National Geographic Magazine* may be obtained from the National Geographic Society for educational use. The pictures are available in packets of 48 sheets and 96 sheets at 30c and 50c a packet respectively. Color pictures of the United States, Central America and the Caribbean countries, South America, Europe, Asia, Africa, Australia, Natural History subjects, the circus, flags, and Indians are included in the list of subjects. A list of these subjects and a blank for ordering may be obtained from The National Geographic Society, School Service, 16th and M Streets, Washington, D. C.



Photograph by Lawrence A. Fernsworth

THE FIRST THOUGHT OF SMUGGLERS, THE LAST RESORT OF REFUGEES

Trails in the Pyrenees wind through passes that may be blocked by snow for eight months a year. In such unproductive regions, a man's best source of income may be a knowledge of short cuts over the mountains, with the resultant "industry" of smuggling. Entire villages in the Pyrenees depend on supplies brought in by pack mules. With railroads and roads choked by traffic, some of the fleeing populace of Spain toiled by mountain trails into France.

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Britain's Volcanic Little Colony, Aden, Celebrates Centenary

LAST month brought a centenary to the youngest of England's Crown Colonies: Aden, a small crescent of John Bull's realm curving along the coast of southwest Arabia.

A British punitive expedition undertook to convince the local Sultan that shipwrecked Britons should not be mistreated. As a result, the Sultan's chief town and port in January, 1839, was annexed to the nearest British dependency —then India.

Almost two years ago Aden was made a separate Crown Colony, ruled now from London instead of India.

Town Perched on a Volcano

The western tip of Aden narrows to a point at the Strait of Bab el Mandeb, where the Red Sea empties into the Gulf of Aden. Under British control, the Colony makes this Arabian strait into a strategic pass, like Gibraltar and Suez—the third on England's long arm of trade through the Mediterranean and Red Seas to India.

About 100 miles east of the Strait of Bab el Mandeb, on a barren, rocky peninsula tied to the mainland by a giraffelike neck of land, the seaport Aden stands guard over ships that pass that way.

Clinging to the side of an extinct volcano whose summit looms some 1,800 feet above the sea, Aden rises hot and arid from its blue harbor. In monsoon season, clouds of dust hover over the town, plus sand blown down from the interior, blotting out what few spots of green manage to keep alive.

Dust is everywhere, foreign residents complain. It flavors their lemonade and beer. It camouflages Aden's prowling cats with a coat of dull reddish brown. Rain seldom reaches this desertlike stronghold. But a shower brings panic, lest it develop into one of the periodic floods. On the other hand, to relieve the scarcity of fresh water, natives keep household utensils always at hand, ready to rush out and collect what few precious drops may fall.

Aden's History Dips Deep into the Past

In the century before Christ, Romans sailed against Aden and conquered it, calling it *Attanae* in *Arabia Felix* ("Happy Arabia"). Portuguese and Turks later fought for this volcanic rock. In 1839 the English annexed it to their territory in India. Later Aden became a free port and a coaling station; its boundary was pushed back from the coast. When the Suez Canal was dug, trade boomed in these waters, to Aden's profit.

Every day, now, ships of many nations are gathered into the arms of Aden's wide, shallow bay. Steamships, tankers, tramps represent home lands from Norway to Japan, France to Greece. They bring cotton goods, grain, coal, sugar, fuel oil, and tobacco, and take away much the same cargo. For Aden's main function is that of transshipment.

The old Caravan Route is dead, and the once thriving demand for frankincense and myrrh is gone. But small fleets still set out from south Arabian and African ports with the spicy cargo destined for the warehouses of Aden, and camels still march primly down the Hedjaz with coffee and skins. Aden itself produces salt and cigarettes.

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Chillán, an inland city of 50,000 population, situated fifty miles northeast of Concepción, is in ruins. The capital of Nuble Province, Chillán lies at the base of the volcano Nevado de Chillán.

Note: The area devastated by Chile's recent earthquake may be located on The Society's Map of South America, which was issued as a supplement to the December, 1937, issue of the *National Geographic Magazine*. Separate copies can be obtained from The Society's Washington, D. C., headquarters at 50c (paper), and 75c (linen).

See also "Bonds Between the Americas," and "Inside Cape Horn," *National Geographic Magazine*, December, 1937; "Flying the World's Longest Air-Mail Route," March, 1930; "Twin Stars of Chile," February, 1929; "How Latin America Looks from the Air," October, 1927; "A Longitudinal Journey Through Chile," September, 1922; "Scenes in South America" (rotogravure insert), October, 1921; and "The Awakening of Argentina and Chile," August, 1916.

Bulletin No. 4, February 20, 1939.

Photograph by Junius B. Wood

EXTREME HEIGHTS PLUS EXTREME DEPTHS IS ONE FORMULA FOR EARTHQUAKES

High Andean chains and a deep ocean trough paralleling them along the west coast of South America furnish the usual conditions under which earthquakes occur, as if the earth rebelled at weight too unequally distributed and shook to level the burden. The photograph, taken from an altitude of 20,700 feet, shows the lofty Andean valleys above the clouds which surround Aconcagua, highest peak in the Western Hemisphere, which rises 23,098 feet near the edge of the long stretch of Chile recently rocked by earthquakes.

Nation Jostles Nation in Aden

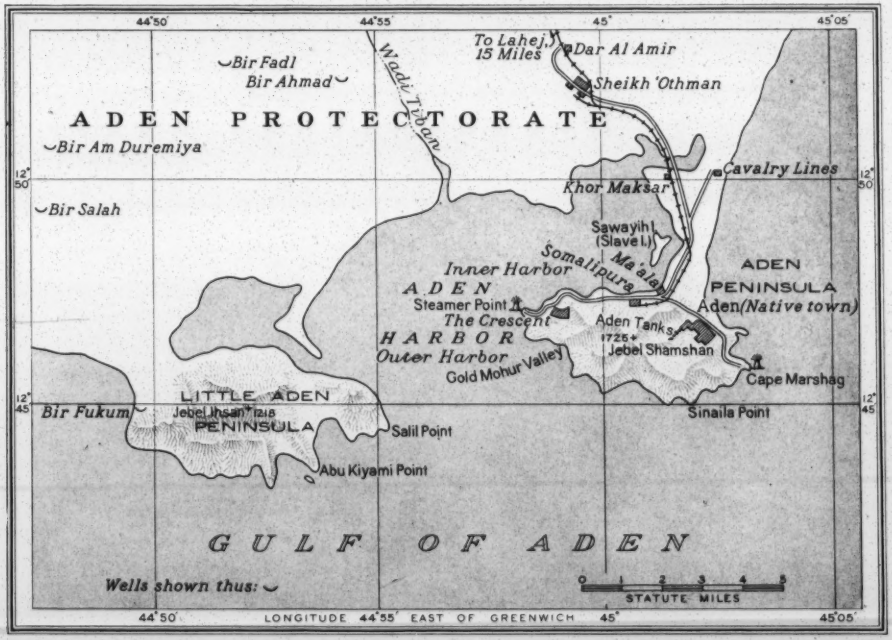
Most of the varied nationalities—German and Japanese, Swedish, Italian, French and Greek—who come to do business in Aden, are transients, leaving on the same ship that brought them from some far-off port.

To those who remain—especially the English garrisoned there—Aden is a temporary home. They combat the heat and dust with typical colonial amusements: tennis, when the high winds are still; camel racing, hunting, flying and sailing. For swimmers, the sharks have been deprived of a small section of the big bay which is marked off with wire netting. For the mountain-climber, undaunted by the burning, crumbling surface of volcanic rocks, there is plenty of exercise at his back door in Aden.

Note: An interesting description of Aden, "The Rock of Aden," accompanied by 22 black and white illustrations, is found in the December, 1935, *National Geographic Magazine*. Additional photographs and text are found in "Pearl Fishing in the Red Sea," November, 1937; "The 'Pilgrim' Sails the Seven Seas," August, 1937; and "The Rise of the New Arab Nation," November, 1919.

The Colony of Aden may be located on The Society's Map of the World, issued as a free supplement to the December, 1935, *Geographic*. Copies may be had at 50c (paper) from The Society's Washington, D. C., headquarters.

Bulletin No. 5, February 20, 1939.



Drawn by Arthur J. Hazes

VOLCANO GATEPOSTS PROTECT THE ENTRANCE TO ADEN PROTECTORATE

A broken-down volcano allows Aden Settlement to keep its head above water on the Aden Peninsula east of the harbor. Another extinct volcano, less lofty and less populous, forms the shorter peninsula to the west. The diagonally shaded block, The Crescent, near the lighthouse on Steamer Point, is the modern town. The larger and older native settlement farther east sprawls across a broken crater wall. The Settlement occupies only 75 square miles, but the Protectorate embraces some 42,000 square miles of Arabia's southwest. Somalis from Africa just across the Gulf of Aden are practically as numerous as Arabs. Sheikh 'Othman, a few miles north of Aden Settlement by road or railroad, is an important native village on the mainland.

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